2.2.3.11 Western Coulee and Ridges Ecological Landscape

Figure 2-33. Western Coulee and Ridges Ecological Landscape.

General Description

The Western Coulee and Ridges Ecological Landscape in southwestern and west central Wisconsin (Figure 2-33) is characterized by its highly eroded, driftless topography and relatively extensive forested landscape. Soils are silt loams (loess) and sandy loams over sandstone residuum over dolomite. Several large rivers including the Wisconsin, Mississippi, Chippewa, Kickapoo, and Black flow through or border the Ecological Landscape.

Vegetation

Historical vegetation consisted of southern hardwood forests, oak savanna, scattered prairies, and floodplain forests and marshes along the major rivers. With Euro-American settlement, most of the land on ridgetops and valley bottoms was cleared of oak savanna, prairie, and level forest for agriculture. The steep slopes between valley bottom and ridgetop, unsuitable for raising crops, grew into oak-dominated forests after the ubiquitous presettlement wildfires were suppressed.

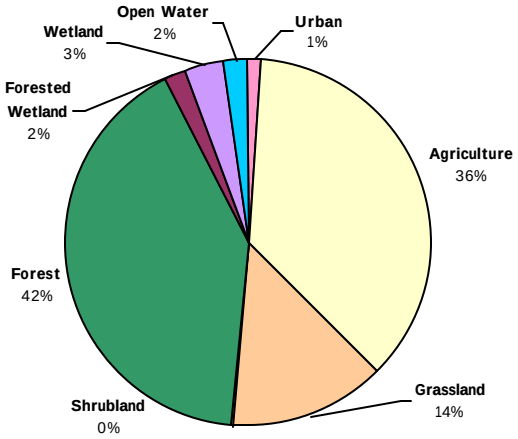

Figure 2-34. Current land cover in the Western Coulee and Ridges Ecological Landscape.

Current vegetation is a mix of forest (40%), agriculture, and grassland with some wetlands in the river valleys (Figure 2-34). The primary forest cover is oak-hickory (51%) dominated by oak species and shagbark hickory. Maple-basswood forests (28%), dominated by sugar maple, basswood, and red maple, are common in areas that were not subjected to repeated presettlement wildfires. Bottomland hardwoods (10%) are common in the valley bottoms of major rivers and are dominated by silver maple, ashes, elms, cottonwood, and red maple. Relict conifer forests including white pine, hemlock, and yellow birch are a rarer natural community in the cooler, steep, north slope microclimates.

Hydrologic Features

There are no natural lakes in this Ecological Landscape, but there are a number of impoundments. Levels of stream and groundwater pollution are worse than average, according to Wisconsin DNR watershed rankings.

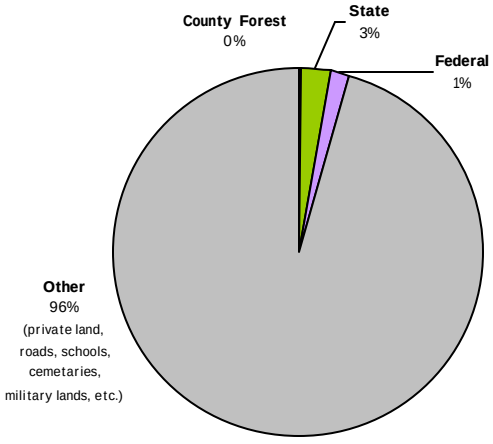

Figure 2-35. Public land ownership in the Western Coulee and Ridges Ecological Landscape.

Land Use

The total land area for the Western Coulees and Ridges Ecological Landscape is approximately 2.2 million acres, of which 38% is classified as timberland. Public land ownership includes only 3% of this Ecological Landscape (Figure 2-35) .

Socioeconomics

Socioeconomic data are summarized based on county-level approximations of the Ecological Landscape (referred to as a "region"). Economic data are available only on a political unit basis with counties as the smallest unit. The counties included in this

socioeconomic region are Buffalo, Crawford, Dane, Dunn, Eau Claire, Grant, Iowa, Jackson, LaCrosse, Monroe, Pepin, Pierce, Richland, Sauk, Trempeleau, and Vernon ("Western Coulees and Ridges Region"). Although less than 25% of Dane County and none of the Madison Metropolitan area lies within this Ecological Landscape, it was included in the socioeconomic region. Including Dane County may cause some discrepancies when analyzing the socioeconomic structure, however, the social and economic character of the Ecological Landscape and its residents may be significantly impacted by Madison's proximity.

Agriculture is an important part of the economy in the Western Coulees and Ridges Region. Compared to the other regions, it has the second highest percent of farmland acreage and ranks relatively high in both milk and corn production per acre. Note that farmland is defined as all land under farm ownership, which includes cropland, pastureland and woodland. Agriculture is primarily dairy and beef farms; pastures and Conservation Reserve Program areas are common.

Wooded slopes are often managed for oak saw log production. Recreational resources are abundant. The counties of the Western Coulees and Ridges Region have the highest number of state parks, forests, and recreation areas, and the second highest number of state fishery and wildlife areas, as well as several federal wildlife refuges along the Mississippi River. Although it has the lowest percentage of timberland sold or diverted to other uses, a relatively high proportion of the agricultural land sold is being diverted to other uses.

The population density (76 persons/mi^2) is less than that of the state as a whole (96 persons/mi^2). Its population is decidedly young with the second lowest percentage elderly (over 65 years old) and racially diverse with the third highest percentage of African Americans and Asians. Economically, this Ecological Landscape is about average with relatively low unemployment. The proportion of government jobs in this region is second highest in the state with a below-average number of manufacturing jobs. (The demographic and economic information for this region is significantly impacted by including Dane County.)

Management Opportunities

- Restoration and maintenance of red and white oak as a cover type.
- Protection and maintenance of relict hemlock stands.
- Goat prairie restoration and maintenance.
- Grassland wildlife management.
- Preservation of cliff communities, along with cave and bat hibernacula.
- Management of floodplain forests and large southern upland forest tracts.
- Oak savanna restoration.
- Sand prairie and oak barrens restoration and maintenance (on terraces associated with the major rivers).
- Reforestation of marginal agricultural land to facilitate management of large forest blocks compared to other areas in southern Wisconsin.
- Protection of rare features found only in the Driftless Area, such as Algific Talus Slopes.
- Big river protection and maintenance. Some of these streams support especially rich or otherwise significant assemblages of fish, herptiles and aquatic invertebrates.
- Restoration and protection of spring-fed cold water streams.

Natural Communities

The following table (Table 2-13) lists the natural communities occurring in the Western Coulee and Ridges arranged by the level of opportunity to sustain and manage the community type in this Ecological Landscape. For further explanation of natural communities and opportunities to sustain them, see Section 3.3.

Table 2-13. Natural communities occurring in the Western Coulee and Ridges arranged by the level of opportunity to sustain and manage the natural community type in this Ecological Landscape.

Major Opportunity	Important Opportunity	Present
Floodplain Forest	Northern Dry-Mesic Forest	Northern Hardwood Swamp
Hemlock Relict	Northern Wet Forest	Northern Mesic Forest
Pine Relict	Southern Tamarack Swamp	Northern Wet-Mesic Forest
Southern Dry Forest	Pine Barrens	Southern Hardwood Swamp
Southern Dry-Mesic Forest	Mesic Prairie	Bog Relict
Southern Mesic Forest	Emergent Aquatic-Wild Rice	Calcareous Fen (Southern)
Cedar Glade	Alder Thicket	
Oak Opening	Ephemeral Pond	
Oak Woodland	Northern Sedge Meadow	
Oak Barrens	Southern Sedge Meadow	
Dry-Mesic Prairie	Wet-Mesic Prairie	
Dry Prairie	Wet Prairie	
Sand Prairie		
Emergent Aquatic		
Submergent Aquatic		
Shrub Carr		
Algific Talus Slope		
Bedrock Glade		
Dry Cliff		
Moist Cliff		